

US006167469A

United States Patent [19]

Safai et al.

[11] Patent Number: 6,1

6,167,469

[45] **Date of Patent:**

Dec. 26, 2000

[54] DIGITAL CAMERA HAVING DISPLAY DEVICE FOR DISPLAYING GRAPHICAL REPRESENTATION OF USER INPUT AND METHOD FOR TRANSPORTING THE SELECTED DIGITAL IMAGES THEREOF

[75] Inventors: Mohammad A. Safai, Los Altos;

Eugene Wang, Palo Alto, both of Calif.

[73] Assignee: Agilent Technologies, Inc., Palo Alto,

Calif.

[21] Appl. No.: 09/081,491

[22] Filed: May 18, 1998

[51] **Int. Cl. G06F 13/10** [52] **U.S. Cl. 710/62;** 710/3; 710/8; 710/33; 709/217; 709/234; 345/329; 345/349;

348/22; 348/64; 348/157; 348/158; 348/207; 348/211; 348/220; 348/222; 348/231; 348/333;

566; 700/91; 704/270; 707/530; 709/204, 217, 234; 713/176, 179; 710/3, 8, 33, 62

[56] References Cited

U.S. PATENT DOCUMENTS

3,744,390	7/1973	Clark 396/360
3,820,133	6/1974	Adorney et al 396/1
3,852,602	12/1974	Gramm et al
3,864,708	2/1975	Allen 396/2
3,974,329	8/1976	Zenzefilis
4,005,261	1/1977	Sato et al
4,013,876	3/1977	Anstin
4,092,654	5/1978	Alasia 396/330
4,097,893	6/1978	Camras
4,423,934	1/1984	Lambeth et al 396/661
4,544,960	10/1985	Konishi

(List continued on next page.) FOREIGN PATENT DOCUMENTS

8-98124 4/1996 Japan.

OTHER PUBLICATIONS

Computergram International, "Toshiba Still Camera Has Modem and Software", Aug. 1995.

Ricoh Consumer Products Group—Product Introduction, "Multimedia: Ricoh ships award-winning RDC-1 digital camera that records stills, motion scences & sound; new multimedia device available in photo, computer & consumer electronic retail outlets", Apr. 1996.

Primary Examiner—Thomas C. Lee Assistant Examiner—Thuan Du

[57] ABSTRACT

A method and apparatus for transporting digital images is provided. In one embodiment, a personal electronic handheld digital camera executes an application program that enables a user of the camera to send one or more digital images, formed by and stored in the camera, from the camera to a destination. One or more addresses describing one or more destinations are selected or identified. One or more stored digital images are selected and associated with the one or more addresses. Optionally, a voice message is recorded and associated with the one or more addresses. The camera is coupled to a data communication network, and a transport operation is initiated. Under control of the application, the camera sends the selected images to the designated destinations over the data communication network. When an address is a physical address, for example, a postal mail address, the selected images are automatically routed to a central server. At the central server, tangible copies of the selected images are printed, packaged, and sent to the physical address. Each image may be marked with an authentication stamp that uniquely identifies the image or the camera that created the image, guarding against unauthorized alteration.

38 Claims, 13 Drawing Sheets

